

12, 2003, the Examiner rejected claims 27-29 and 31-52 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,666,293 to Metz et al. ("Metz").

The Examiner rejected claim 27 under 35 U.S.C. § 102(e) as anticipated by Metz. Claim 27 recites a downloading apparatus for a broadcast receiver comprising, among others, a storage element that has a domain for storing a bootstrap program, wherein the bootstrap program controls an initial boot routine, and the initial boot routine includes automatically updating a downloaded program when the downloaded program is not complete.

On the contrary, in Metz, for automatic activation of an operation system upgrade process, a process monitors some periodic occurrence, such as passage of some time interval or cycles of turn-off by a user. See, for example, col. 5, lines 51-56. Nowhere does Metz disclose at least a storage element that has a domain for storing a bootstrap program, wherein the bootstrap program controls an initial boot routine, and the initial boot routine includes automatically updating a downloaded program when the downloaded program is not complete as claimed. Since Metz fails to teach each and every one of the elements in the combination of claim 27, Applicants respectfully submits that Metz does not anticipate claim 27 under 35 U.S.C. § 102(e) and that the rejection of claim 27 be withdrawn.

Claims 28, 29, 31, and 32 depend on claim 27. For at least the reasons given above with respect to claim 27, Applicants respectfully request that the rejection of claims 28, 29, 31, and 32 under 35 U.S.C. § 102(e) be withdrawn and the claims be allowed.

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The Examiner rejected claim 33 under 35 U.S.C. § 102(e) as anticipated by Metz. Claim 33 recites a downloading apparatus for a broadcast receiver comprising, among others, a storage element for backing up a control program before replacing the control program with a new control program.

In Metz, a new version of an operating system is stored in RAM. See, for example, col. 10, lines 1-4. Then, if no errors are found, a microprocessor transfers the new version of the operating system from RAM to non-volatile memory, effectively writing the new version over the old version in the non-volatile memory. See, for example, col. 10, lines 3-9. Nowhere does Metz disclose at least a storage element for backing up a control program before replacing the control program with a new control program. Since Metz fails to teach each and every one of the elements in the combination of claim 33, Applicants respectfully submit that Metz does not anticipate claim 33 under 35 U.S.C. § 102(e) and that the rejection of claim 33 be withdrawn.

Independent claims 38 and 47, although of different scopes, include recitations similar to those in claim 33 discussed above. Claims 34-37, 39-41, and 48-52 depend on claims 33, 38, and 47, respectively. For at least the reasons given above with respect to claim 33, Applicants respectfully request that the rejection of claims 34-41 and 47-52 under 35 U.S.C. § 102(e) be withdrawn and the claims be allowed.

The Examiner rejected claim 42 under 35 U.S.C. § 102(e) as anticipated by Metz. Claim 42 recites a method for downloading a control program from a broadcast signal in a digital broadcast receiver comprising, among others, examining a byte of a memory indicating a version of a control program stored in said memory during an initial boot routine.

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As discussed above with respect to claim 27, Metz does not disclose an initial boot routine that includes automatically updating a downloaded program when the downloaded program is not complete. Moreover, in Metz, version numbers are checked after initiating execution of the operating system upgrade process. See, for example, col. 36, lines 17-37. Nowhere does Metz disclose at least examining a byte of a memory indicating a version of a control program stored in said memory during an initial boot routine. Since Metz fails to teach each and every one of the elements in the combination of claim 42, Applicants respectfully submit that Metz does not anticipate claim 42 under 35 U.S.C. § 102(e).

Claims 43-46 depend on allowable claim 42. For at least the reasons given above with respect to claim 42, Applicants respectfully request that the rejection of claims 43-46 under 35 U.S.C. § 102 (e) be withdrawn and the claims be allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that every one of claims 27-29 and 31-52 defines patentable subject matter, and that the application is in condition for allowance. Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

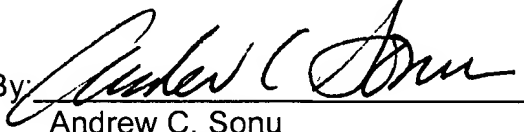
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Respectfully submitted,

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APPENDIX TO AMENDMENT OF JULY 14, 2003

Amendments to the Claims

Please amend claims 27, 33, 38, 42, and 47 as follows:

27. (Three Times Amended) A downloading apparatus for a broadcast receiver, comprising:

a receiver which receives a broadcast signal having a video program signal and a control information signal;

a storage element which stores a control program, said control program controlling the operation of a video program corresponding to said video program signal, wherein the storage element further comprises

a first domain for storing a version number of the control program,

a second domain for storing a downloaded program and a predetermined version number indicating a version of the downloaded program, **[and]**

a third domain for storing the control program₁[:]; and

a fourth domain for storing a bootstrap program, wherein the bootstrap program controls an initial boot routine, the initial boot routine including automatically updating the downloaded program when the downloaded program is not complete; and

a micro-controller for replacing said control program in the storage element with the downloaded program based on said control information signal, the version number of the control program, and said predetermined version number.

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33. (Three Times Amended) A downloading apparatus for a broadcast receiver, comprising:

a receiver **for receiving** **[which receives]** a broadcast signal having a video program signal and a control information signal representing a new control program;

a first storage element **for temporarily storing** **[which temporarily stores]** said control information signal representing the new control program;

a second storage element **for storing** **[which stores]** a control program controlling the operation of a video program corresponding to said video program signal and a predetermined version number indicating a version of the new control program;

[and]

a controller **for replacing** **[which replaces]** the control program in the second storage element with the new control program based on said control information signal and said predetermined version number;[.]

a third storage element for backing up the control program before the replacing of the control program in the second storage element with the new control program.

38. (Amended) A method for downloading a control program from a broadcast signal in a broadcast receiver, comprising:

storing a control program in a first domain of a memory;

storing a predetermined value corresponding to said stored control program in a second domain of the memory;

selecting a name of a control program to be downloaded;

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separating a control program corresponding to said selected control program name from a broadcast signal;

backing up said stored control program in a third domain of a memory;

replacing said stored control program with said separated control program corresponding to said program name in said first domain of the memory; and

replacing said stored predetermined value with a version number corresponding to said replaced control program in the second domain of the memory.

42. (Twice Amended) A method for downloading a control program from a broadcast signal in a digital broadcast receiver, comprising:

examining a byte of a memory indicating a version of a control program stored in said memory **during an initial boot routine**; and

replacing the stored control program with a new control program from a broadcast signal when said examined byte includes a predetermined value, and processing said broadcast signal based on said control program stored in the memory when said examined byte fails to include the predetermined value.

47. (Amended) A method for downloading a control program from a broadcast signal in a broadcast receiver, comprising:

providing a name of a control program to be downloaded;

writing a predetermined valued in a first domain of a memory;

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backing up a control program which is stored in a second domain of the memory in another memory;

deleting **the [a]** control program which is stored in **the [a]** second domain of the memory;

downloading a control program corresponding to said program name from a broadcast signal into said second domain of the memory;

replacing said predetermined value with a version number corresponding to said downloaded control program in the first domain of the memory.]; **and]**

[storing the downloaded control program in another memory.]

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